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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,515	08/14/2001	Kumaraguru Muthukumaraswamy	K107-app	8393

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EXAMINER	
CAO, CHUN	
ART UNIT	PAPER NUMBER
2185	

DATE MAILED: 12/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/929,515	Applicant(s) Rostoker et al.
	Examiner Cao Chun	Art Unit 2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Aug 4, 2001* .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *23-46* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *23-46* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. Claims 23-46 are presented for examination.

Double Patenting

2. The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent, the possible harassment by multiple assignees, and the possibility that one might avoid the effect of file wrapper estoppel by filing a second application. *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and © may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 23-46 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,279,045, respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to have the same apparatus (multimedia interface) for the two systems operate the same.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> > (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 23, 26-28, 31, 33, 35, 42 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Martel et al., U.S. Patent No. 5,887,165 (hereinafter "Martel).

As claim 23, Martel discloses an interface [fig. 1] comprising:

an integrated circuit chip [11, fig. 1; col. 3, lines 38-40];

a block of reconfigurable logic as a field programmable gate array that incorporated on the chip [13, fig. 1; col. 3, lines 40-41];

a block media processor [digital signal processor, fig. 1; col. 3 lines 47-48] with a virtual instruction set capable of implementing a variety of multimedia algorithms incorporated on the chip separately from the reconfigurable logic block [fig. 1; col. 5, lines 15-20].

As claims 26, Martel discloses a programmable, fast serial interface core incorporated on the IC chip [fig. 1; col. 3, line 43].

As claim 27, Martel discloses a programmable CPU interface core incorporated on the IC chip [fig. 1, col. 3, lines 43-53].

As claim 28, Martel discloses a programmable memory interface [fig. 1, col. 3, lines 43-53].

As claims 31 and 40 are written in means plus function format and contain the same limitation as claims 23 and 26, therefore the same rejections applied.

As claims 33 and 42 are written in means plus function format and contain the same limitation as claims 23 and 27, therefore the same rejections applied.

As claims 35 and 44 are written in means plus function format and contain the same limitation as claims 23 and 28, therefore the same rejections applied.

6. Claims 23-24, 26-29, 31-36, 38 and 40-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilson, U.S. Patent No. 5,600,845 (hereinafter "Gilson").

Gilson is a prior art reference cited by applicant on paper no. 4.

As claim 23, Gilson discloses a multimedia interface [fig. 1; col. 7, lines 53-56] comprising:

an integrated circuit chip [10, fig. 1; abstract, lines 1-3];

a block of reconfigurable logic as a field programmable gate array that incorporated on the chip [16, fig. 1; col. 5, lines 24-26];

a block media processor [RISC processor] with a virtual instruction set capable of implementing a variety of multimedia algorithms [instruction code, col. 5, lines 32-34] incorporated on the chip separately from the reconfigurable logic block [14, fig. 1; col. 5, lines 23-35; col. 6, lines 43-45, lines 60-61].

As claims 24, 26-28, Gilson's system comprising: an audio CODEC for interfacing to external analog multimedia signal [90, 96, fig. 3]; a serial interface core [col. 5, lines 40-42]; a CPU interface core [18, fig. 1; col. 5, line 26]; and a memory interface core [col. 5, lines 32-33].

As claims 29 and 38 are written in means plus function format and contain the same limitation as claims 23 and 24, therefore the same rejections applied.

As claims 31 and 40 are written in means plus function format and contain the same limitation as claims 23 and 26, therefore the same rejections applied.

As claims 32, 34, 36, 41, 43 and 45, Gilson discloses the programmable, fast serial interface core, the programmable memory interface and the programmable CPU interface are incorporated within the reconfigurable logic block [fig. 1; col. 5, lines 29-35].

As claims 33 and 42 are written in means plus function format and contain the same limitation as claims 23 and 27, therefore the same rejections applied.

As claims 35 and 44 are written in means plus function format and contain the same limitation as claims 23 and 28, therefore the same rejections applied

Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 24-28, 30, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilson, U.S. Patent No. 5,600,845 as applied to claim 1 above, and further in view of Chang, U.S. Patent No. 5,687,325 (hereinafter "Chang").

Chang is a prior art reference cited by applicant in paper no. 4.

Gilson does not explicitly disclose a phase locked loop.

As claims 24-28, Change discloses a video CODEC for interfacing to external analog signals [col. 7, lines 6-22]; a clock circuitry [62, fig. 2] for synchronizing off-chip clock circuit [col. 7, lines 24-25]; a serial interfacing core and a CPU interface core [col. 5, lines 8-10]; and a programmable memory interface core [col. 5, lines 19-24].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Gilson and Chang because Chang's teachings of having a clock circuit would increasing the efficiency of Gilson's system by reducing skew within various block in order to make the configurable circuit more useful and synchronizing the off-chip clock circuitry for high speed serial data input.

As claims 30 and 39 are written in means plus function format and contain the same limitation as claim 23 and 25 , therefore the same rejections applied.

Allowable Subject Matter

9. Claims 37 and 46 are allow over prior art.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703)308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703)305-9717. The fax number for this Art Unit are followings: After-Final (703) 746-7238; Official (703) 746-7239; Non-Official (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)306-5631.

Chun Cao

Nov. 27, 2002

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100